

Appl. S.N. 09/681,949  
Amdt. Dated August 21, 2003  
Reply to Office Action of May 23, 2003

RD-29,070

#### REMARKS/ARGUMENTS

This amendment is responsive to the Office Action mailed May 23, 2003 wherein claims 1-25 were rejected by the Examiner stating an internet document dated March 1998 by GE Corporate Research & Development (hereinafter "Press Release"), "Industrial Haptics", represents an offer for sale bar; claims 18-25 were rejected under 35 USC §112, second paragraph, as being indefinite; claims 1, 7, 8, 9 and 15 were rejected under 35 USC §102(b) as being anticipated by Press Release and further rejected under 35 USC §102(b) based on a public use or sale of the invention based on Press Release; and claims 1-25 were rejected under USC §103 (a) in view of Jayaram et al. (PCT/US99/30753) in view of Dede (Congressional testimony, Joint Hearing on Education Technology in the 21<sup>st</sup> Century) and further in view of Nitta et al. (GB 2,327,289). In this amendment, claims 1, 2, 8, 9, 18, 23 and 24 have been amended. No new matter has been added.

Claims 1-25 remain pending in this application. Reconsideration in light of the above amendments and the following remarks is respectfully requested.

The Examiner's presentation of the Press Release as evidence of an offer for sale will be discussed with reference to the rejection of claims 1, 7, 8, 9 and 15 under 35 USC §102(b).

Claims 18, 23 and 24 have been amended to more definitely recite Applicants' invention. The term "adapted" has been replaced with the term "for" throughout the claims to more clearly recite Applicants' invention. Applicants respectfully submit that claims 18, 23 and 24, as amended, more particularly point out and distinctly claim the subject matter which Applicants regard as the invention and overcome the rejection under 25 USC §112, second paragraph. Claims 19-22 and 25 depend directly or indirectly from claim 18 and 24 and therefore similarly overcome the rejection. Withdrawal of the rejection of claims 18-25 under 35 USC §112, second paragraph is respectfully requested.

Claims 1, 2, 3, 8, 9 and 18 have been amended to more particularly recite Applicants' invention. As amended, independent claims 1, 8 and 18 now recite validating at least one sequence in a virtual environment to ensure the sequence can be performed by field service personnel. Claims 2 and 3, which depend from claim 1, and claim 9, which depends from claim 8, recite further inventive features and have been amended to have antecedent basis for features claimed in the independent claims. Support for the amendments can be found in the specification at, for example, paragraphs 60 and 61 on pages 18 and 19 of the specification. No new matter has been added.

The rejection of claims 1, 7, 8, 9 and 15 under 35 USC §102 (b), as being anticipated by Press Release and as being a public use or sale of the invention, is respectfully traversed.

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The present invention, as claimed in claims 1, 7, 8, 9 and 15 is patentable over the Press Release reference. "Anticipation requires the disclosure in a single prior art reference of each element of the claim under consideration." W.L. Gore & Associates v. Garlock, Inc., 220 USPO 303, 313 (Fed. Cir. 1983).

The Press Release does not disclose each element of the present invention as claimed in claims 1, 7, 8, 9 and 15. Specifically, the present invention claims generating at least one validated sequence of actions for a maintenance task, validating the sequence in a virtual environment to ensure the sequence could be performed by field service personnel and thereafter delivering instructions for the validated sequence. Nowhere does the Press Release show, disclose or teach Applicants' generating step and validating step to validate the sequence in a virtual environment to ensure the sequence can be performed by field service personnel as specifically recited in claims 1, 7, 8, 9 and 15, particularly independent claims 1 and 8, as amended.

The Press Release and associated links referred to in the Office Action merely disclose various industrial haptics systems and applications for design, assembly and maintenance. However, nowhere does the Press Release disclose that a sequence is validated in a virtual environment to ensure the sequence could be performed by field service personnel. By contrast, the focus of the Press Release is to increase a designer's productivity and to simulate physical interaction using advanced haptics devices. Nowhere does the Press Release show, disclose or teach validating a sequence to ensure the field personnel can perform the sequence. Thus, the Press Release does not disclose every element of Applicants' claimed invention. Accordingly, the present invention, as claimed in claims 1, 7, 8, 9 and 15 is not anticipated by the Press Release. Therefore, as stated above, the present invention, as claimed in Claims 1, 7, 8, 9 and 15 are patentable over the Press Release. Thus, it is respectfully requested that the rejection of Claims 1-2, 4-12 and 14-15 under 35 USC §102 (b) as being anticipated by the Press Release be withdrawn.

With respect to the Examiner's representation that the Press Release constitutes a public use or sale of the invention under 35 USC §102 (b) more than one year prior to the date of Applicants' invention, Applicants further respectfully submit that the present invention, as claimed in claims 1, 7, 8, 9 and 15 is not anticipated by the Press Release for the reasons set forth above. Accordingly, since the Press Release does not teach or disclose the claimed invention, therefore Applicants submit that the claimed invention is not embodied in the Press Release. Under MPEP 2133.03(b) under paragraph C. "Objective Evidence of Sale or Offer To Sell Is Needed":

"In determining if a sale or offer to sell the claimed invention has occurred, a key question to ask is whether, under the totality of the circumstances, the inventor sold or offered for sale a

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product that embodies the invention claimed in the application. Objective evidence such as a description of the inventive product in the contract of sale or in another communication with the purchaser controls over an uncommunicated intent by the seller to deliver the inventive product under the contract for sale. *Ferag AG v. Quipp, Inc.*, 45 F.3d 1562, 1567, 33 USPQ2d 1512, 1516 (Fed. Cir. 1995). "

Applicants respectfully submit that if the Press Release were to be considered such a commercial communication or evidence of a sale (Applicants do not agree that it is and will provide further discussion on this point below), then under MPEP 2133.03 (b), Press Release cannot be found to be objective evidence since the Press Release does not embody all elements of the claimed invention as discussed above in the traversal of the rejection under 35 USC §102(b). Since the Press Release does not disclose all elements of the claimed invention, particularly as recited in amended independent claims 1 and 8, and claims depending thereon. Therefore, as stated above, the present invention, as claimed in Claims 1, 7, 8, 9 and 15 are patentable over the Press Release. Thus, it is respectfully requested that the rejection of Claims 1-2, 4-12 and 14-15 under 35 USC §102 (b) based on a sale or offer for sale by the Press Release be withdrawn.

Applicants further respectfully submit that in accordance with MPEP 2133.03(e)(1) "Commercial Exploitation", the Press Release taken alone is insufficient to indicate commercial exploitation. Other significant factors indicative of "Commercial Exploitation" as discussed in MPEP 2133.03 (e)(1) must also be examined to determine intent of commercial activity. Such factors include:

"(A) Preparation of various contemporaneous "commercial" documents, e.g., orders, invoices, receipts, delivery schedules, etc.;

(B) Preparation of price lists (*Akron Brass Co. v. Elkhart Brass Mfg. Co.*, 353 F.2d 704, 709, 147 USPQ 301, 305 (7th Cir. 1965) and distribution of price quotations (*Amphenol Corp. v. General Time Corp.*, 158 USPQ 113, 117 (7th Cir. 1968));

(C) Display of samples to prospective customers (*Cataphote Corp. v. DeSoto Chemical Coatings, Inc.*, 356 F.2d 24, 27, 148 USPQ 527, 529 (9th Cir. 1966) *mod. on other grounds*, 358 F.2d 732, 149 USPQ 159 (9th Cir.), *cert. denied*, 385 U.S. 832 (1966); *Chicopee Mfg. Corp. v. Columbus Fiber Mills Co.*, 165 F.Supp. 307, 323-325, 118 USPQ 53, 65-67 (M.D.Ga. 1958));

(D) Demonstration of models or prototypes (*General Elec. Co. v. United States*, 206 USPQ 260, 266-67 (Ct. Cl. 1979); *Red Cross Mfg. v. Toro Sales Co.*, 525 F.2d 1135, 1140, 188 USPQ 241, 244-45 (7th Cir. 1975); *Philco Corp. v. Admiral Corp.*, 199 F. Supp. 797, 815-16, 131 USPQ 413, 429-30 (D.Del. 1961)), especially at trade conventions (*InterRoyal Corp. v. Simmons Co.*, 204

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USPQ 562, 563-65 (S.D. N.Y. 1979)), and even though no orders are actually obtained (*Monogram Mfg. v. F. & H. Mfg.*, 144 F.2d 412, 62 USPQ 409, 412 (9th Cir. 1944));

(E) Use of an invention where an admission fee is charged (*In re Josserand*, 188 F.2d 486, 491, 89 USPQ 371, 376 (CCPA 1951); *Greenewalt v. Stanley*, 54 F.2d 195, 12 USPQ 122 (3d Cir. 1931)); and

(F) Advertising in publicity releases, brochures, and various periodicals (*In re Theis*, 610 F.2d 786, 792 n.6, 204 USPQ 188, 193 n. 6 (CCPA 1979); *InterRoyal Corp. v. Simmons Co.*, 204 USPQ 562, 564-66 (S.D.N.Y.1979); *Akron Brass, Inc. v. Elkhart Brass Mfg., Inc.*, 353 F.2d 704, 709, 147 USPQ 301, 305 (7th Cir.1965); *Tucker Aluminum Prods. v. Grossman*, 312 F.2d 393, 394, 136 USPQ 244, 245 (9th Cir. 1963))."

Although Applicants have submitted that the claimed invention is patentable over the Press Release for the reasons detailed above, Applicants respectfully further submit that the Press Release was presented improperly as an offer for sale bar absent other indicia of commercial intent. Withdrawal of the Press Release as evidence of an offer for sale bar is respectfully solicited.

Applicants respectfully traverse the rejection of claims 1-25 under 35 USC §103 over the Jayaram, Dede and Nitta references. Applicants respectfully submit that the references, taken alone or in combination, fail to teach, disclose or suggest the claimed invention, particularly as recited in amended independent claims 1, 8 and 18. To establish a *prima facie* case of obviousness, the claimed invention must be considered as a whole and the references must contain some suggestion or motivation to modify or combine the references. "The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination." *In re Mills*, 916 F. 2d 680, 16 USPQ 2d 1430 (Fed. Circ. 1990).

The Jayaram reference merely discloses a virtual assembly design system and method interaction in the virtual environment as a tool for design and assembly planning. Nowhere does the Jayaram reference teach, disclose or suggest the desirability of using the virtual assembly design methods for maintenance training and nowhere does the Jayaram reference teach or show a recognition of the problems involved in maintenance sequences, such as the need to verify that the sequence can be performed by field service personnel. The Dede reference merely discloses a fictional vignette presented in an educational learning context including haptics/virtual environment learners using selected multimedia for their learning. The Dede reference fails to teach, show or disclose any elements of the haptics/virtual system other than desired functionality, however the Dede reference also fails to teach, show or disclose validating a sequence for a

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maintenance task in order to ensure the sequence could be performed by field service personnel. The Dede reference does not disclose or suggest the considerations or problems associated with maintenance sequences that one skilled in the art might find relevant, such as human factors like ability to see a part or lift a part that are often encountered in maintenance by field service personnel. Thus, there is no teaching, disclosure or suggestion in Dede that one skilled in the art of developing haptics/virtual environments may find relevant. The Nitta reference merely discloses that assembly information is presented in a step-by-step manner. Nowhere does the Nitta reference show, disclose or teach validating a sequence for a maintenance task in order to ensure the sequence could be performed by field service personnel. Further, nowhere does the Nitta reference show or suggest any recognition of the need for validating maintenance sequences to ensure field personnel can perform the sequence.

Applicants interpret the Office Action as stating that virtual design tool of Jayaram be combined with the teachings of a virtual training environment by Dede or that the design tool of Jayaram be combined with the teachings of step-by-step instructions of Nitta in order to obtain Applicants' Invention. Applicants also interpret the Office Action as attempting to combine the design tool of the Jayaram reference in other combinations with features of the Dede and Nitta references. Applicants respectfully submit that no reasonable combination of the applied references would obtain Applicants' claimed invention. "In determining the differences between the prior art and the claims, the question under 35 USC 103 is not whether the differences themselves would be obvious but whether the claimed invention as a whole would have been obvious." MPEP 2141.02 (emphasis in original). Therefore, it is well established that the claim must be evaluated as a whole. Further, it is "impermissible to use the claimed invention as an instruction manual or 'template' to piece together the teachings of the prior art so that the claimed invention is rendered obvious..." *In re Fritch*, 23 USPQ 2d 1780,1784 (Fed. Cir. 1992). The present invention, as recited in amended independent claims 1, 8 and 18 and claims dependent therefrom, is particularly well-adapted to resolve the problems associated with providing maintenance instructions and/or training to field service personnel. The independent claims each recite validating the sequence of a maintenance task in the virtual environment in order to ensure the task can be performed by field service personnel. One skilled in the art would appreciate that a maintenance task is not simply an assembly task in reverse order. Further, personnel performing a maintenance task generally encounter other obstacles such as the ability to reach or grasp parts, visibility and so forth. Applicants claimed invention recognizes these obstacles and recites a validation of a sequence to ensure the field personnel can perform the maintenance tasks. Nowhere do the applied references show such recognition of the problems described above and therefore one skilled in the art would not be motivated to combine any of the teachings of the applied references since the teachings of the applied references do not suggest a modification or combination. Further, Applicants respectfully submit that the claimed invention

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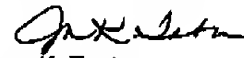
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and prior art were not considered as a whole. Applicants respectfully submit it is improper to combine the features of the applied references using Applicants' claims as guidance. Applicants respectfully submit that there is no teaching, suggestion or motivation found in the applied references to suggest a reasonable combination and further the applied references, taken alone or in combination, do not show, suggest or teach Applicants' claimed invention. Therefore, Applicants' respectfully submit that claims 1-25 are allowable and request that the rejections under 35 USC §103 (a) be withdrawn.

In view of the foregoing amendment and for the reasons set out above, Applicants respectfully submit that the application is in condition for allowance. Favorable reconsideration and prompt allowance of the application are respectfully requested.

Should the Examiner believe that anything further is needed to place the application in condition for allowance, the Examiner is requested to contact Applicants' undersigned representative at the telephone number below.

Respectfully submitted,

  
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